United States Department of Agriculture | **Forest Service** | **Arizona Zone Entomology & Pathology** | **2500 S. Pineknoll Dr. Flagstaff, AZ 86001**

File Code: 3400 **Date:** January 21, 1997
Route To:

Subject: Scheduling of harvesting activities to reduce Ips infestation in the Little analysis area.

To: Monica Boehning, Alpine RD, Apache-Sitgreaves NFs

The answer to your question of whether or not you can begin harvest activities in the Little analysis area during the month of May is simply yes. Many Forests in the state of Arizona have found, like you, that it is almost impossible to schedule harvest activities given all the timing constraints in place. Thus to accomplish something, some guidelines must inevitably be violated and it comes down to a question of which risks seem the least problematic. The decision to conduct harvesting activities during the January to July time frame is the District's. This guideline was developed for reducing Ips caused mortality. It does not take into account the timing obligations for other species or contractual constraints.

In speaking with Jill Wilson about your scheduling dilemma, these concepts/ideas came up. The first Ips flight will generally start in May. Slash layed down at this period of time is the preferred breeding material for this first flight of beetles. However, there is not always a direct association between Ips infestation in slash and subsequent attacks in living trees. In fact in many years, few attacks in standing trees are noted. There does seem to be a good correlation between drought and subsequent Ips related mortality. During droughts, we often observe extensive mortality in and around timber sale areas. Thus the amount of risk you might take is probably directly dependent upon moisture levels this spring. If you decide to harvest during May, we suggest that if you have some control over which stands could be harvested early, that you might choose those stands that will be thinned to a more open condition. A study by Northern Arizona University indicated that slash placed under a 60 sq. ft. canopy received many fewer attacks than those under stands denser than 120 sq. ft. By selecting these types of stands, it would give the slash an opportunity to dry out and provide less suitable breeding material. Save your more densely forested stands to be thinned or harvested for later in the season (if possible). You might also want to consider putting off your pre-commercial thinning until after July.

Another key concept that was brought up was utilization. Other Forests in Arizona, most notably the Prescott, are going with utilization clauses in contracts to help reduce the amount of slash that is layed down during the spring beetle flight. You might contact Gary Wittman on the Bradshaw Ranger District of the Prescott National Forest to find out what those clauses are and how they are implemented.

Other ideas to reduce slash in the Little analysis area include chipping, burying or hauling away this material. These may not be cost effective or truly practical in your situation. A more economical method for dealing with slash is lopping and scattering. This procedure can reduce availability and suitability of slash to beetles for breeding material.

If you have any questions, I can be contacted at (520) 556-2072.

/s/Michelle S. Frank
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